



News Updates

- ◆ Westinghouse submitted DCD Revision 19, which should allow the NRC to continue with the final design approval of the AP1000 later this year, although no schedule has yet been announced.
- ◆ The Nuclear Regulatory Commission completed its Final Environmental Impact Statement for the proposed South Texas Project Units 3 and 4, Comanche Peak Units 3 and 4, Virgil C. Summer Units 2 and 3, and Calvert Cliffs Unit 3 and concluded that there are no environmental impacts that would preclude issuing Combined Licenses for construction and operation of the plants.
- ◆ Toshiba and Babcock & Wilcox have agreed to extend the deadline for USEC to secure a conditional approval for a loan guarantee with the Department of Energy until mid-August.
- ◆ TVA has received a fuel handling license for Watts Bar 2 and expects to begin loading during the summer of 2012.
- ◆ Ur-Energy has obtained the Supplemental Environmental Impact Statement for its Lost Creek in situ Uranium recovery project. The NRC is also completing the Safety Evaluation Report, which it anticipates to release with the final license.

Combined Construction and Operating License (COL)

Summary: Eighteen COL applications have been docketed, twelve of which (totaling 20 nuclear reactors) remain under active NRC review. NRC suspended review of five applications due to changes in technology or economic considerations; one additional application was withdrawn and resubmitted as an ESP. The Reference COL (R-COL) application has been submitted for five reactor designs (ESBWR R-COL was transferred to Fermi since North Anna changed to the US-APWR); the 12 subsequent COLs (S-COLs) will incorporate the corresponding R-COL application by reference, noting any site-specific departures. No COLs have been issued to date.

	UTILITY	SITE/LOCATION		REACTOR/ NO. UNITS		COLA DATES		REVIEW PHASE IN PROGRESS	
						Submitted	Docketed	Safety ⁴	Environ. ⁵
Active COL Applications	Southern Nuclear	Vogtle	GA	AP1000 ¹	2	3/31/08	5/30/08	Ph. 6	Completed
	SCE&G	V.C. Summer	SC	AP1000	2	3/27/08	7/31/08	Ph. D	Completed
	STP Nuclear Operating Co.	South Texas Project	TX	ABWR ¹	2	9/07	11/29/07	Ph. 2	Completed
	Luminant (TXU)	Comanche Peak	TX	US-APWR ¹	2	9/19/08	12/2/08	Ph. 2	Completed
	UniStar (Constellation)	Calvert Cliffs	MD	US-EPR ¹	1	3/08	6/3/08	Ph. 2	Completed
	DTE Energy	Fermi	MI	ESBWR ¹	1	9/18/08	11/25/08	Ph. 2	Ph. 2
	Dominion Energy	North Anna	VA	US-APWR	1	11/27/07	1/28/08	Ph. A	Ph. 2
	Duke Energy	William States Lee	SC	AP1000	2	12/13/07	2/25/08	Ph. B	Ph. 2
	Florida Power and Light	Turkey Point	FL	AP1000	2	6/30/09	9/4/09	Ph. A	Ph. 2
	PPL (UniStar)	Bell Bend	PA	US-EPR	1	10/10/08	12/19/08	Ph. A	Ph. 2
	Progress Energy	Shearon Harris	NC	AP1000	2	2/19/08	4/17/08	Ph. B	Ph. 2
	Progress Energy	Levy	FL	AP1000	2	7/30/08	10/6/08	Ph. B	Ph. 3
Suspended	Entergy (NuStart)	Grand Gulf	MS	ESBWR	1	2/08	4/17/08	Suspended	Suspended
	Entergy	River Bend	LA	ESBWR	1	9/25/08	12/4/08	Suspended	Suspended
	AmerenUE (UniStar)	Callaway	MO	US-EPR	1	7/24/08	12/12/08	Suspended	Suspended
	UniStar (Constellation)	Nine Mile Point	NY	US-EPR	1	9/30/08	12/11/08	Suspended	Suspended
	TVA (NuStart)	Bellefonte	AL	AP1000	2	10/07	1/18/08	Suspended	Suspended

¹ Reference COL Application (R-COL)

⁴Safety Review: **R-COL Ph 1** Issue RAs **Ph 2** SER w/Open Items **Ph 3** ACRS Review **Ph 4** Advanced SER/ No OI **Ph 5** ACRS Review **Ph 6** Final SER
S-COL Ph A Issue RAs and supplemental RAs **Ph B** Advanced SER/ No OI **Ph C** ACRS Review **Ph D** Final SER

⁵ Environmental Review Phases: **Ph 1** Environmental Scoping Report **Ph 2** Draft EIS **Ph 3** Public comment **Ph 4** Final EIS

Reactor Design Certification (DC)

Summary: Two reactor designs that are being considered for future builds are certified; three new designs and two amendments are under NRC review.

- GE ABWR – Certified in 1997 (10CFR52 App A). An amendment was sent in June 2009; under NRC review with rulemaking scheduled December 2011. Toshiba and GE have also submitted Design Certification renewal applications that are currently under review.
- Westinghouse AP1000 – Certified 2006 (10CFR52 App D). An amendment was sent in May 2007; under NRC review with rulemaking currently scheduled September 2011.

- AREVA US-EPR – Submitted December 12, 2007, and docketed February 25, 2008; rulemaking expected in February 2013.
- Mitsubishi Heavy Industries US-APWR – Submitted December 31, 2007, and docketed February 29, 2008; rulemaking expected 2013.
- GE ESBWR – Final Design Approval in March 2011; rulemaking scheduled for September 2011.



Early Site Permits (ESP)

Summary: Four ESPs issued; two under review:

- The following ESPs have been issued: Exelon – Clinton (IL), 3/15/07; Entergy – Grand Gulf (MS), 4/5/07; Dominion – North Anna (VA), 11/27/07; Southern – Vogtle site (GA), 08/26/09.
- On March 25, 2010, Exelon submitted an ESP application for its Victoria County site. This replaces a COL withdrawn July 2009.
- PSEG submitted an ESP application for its nuclear plant site in Salem County, New Jersey, on May 26, 2010, which was docketed August 4, 2010
- NRC anticipates two further ESP applications at Blue Castle and Callaway.

New Nuclear Plant Orders

Summary: Four plant construction contracts have been initiated; nine power companies have ordered large component forgings from three reactor vendors for potential nuclear plants; one vendor ordered other large equipment; two vendors are building large fabrication facilities.

Long-Lead Equipment Orders: Toshiba and Westinghouse have placed large forging orders; Westinghouse has also ordered reactor coolant pumps and containment liner plates.

- SCE&G and Southern have contracted with Westinghouse for long-lead component forgings.
- Japan Steel Works is expanding capacity; AREVA, Doosan, BWXT, and Russia's Uralmash-Izhora Group (OMZ) are among those reportedly developing large forging capabilities.
- AREVA's heavy component manufacturing facility in Newport News, Virginia has been postponed until market conditions become more favorable
- Shaw and Westinghouse built a 410,000-square-foot facility at the Port of Lake Charles, Louisiana, to produce structural, piping, equipment, and other modules for the AP1000 technology.

Plant Construction Contracts: Engineering, Procurement, and Construction (EPC) contracts signed for four plants; a term sheet for a future EPC contract has been signed for one plant.

- Southern Nuclear with Westinghouse and Shaw Group for two AP1000s at Vogtle.
- SCE&G and Santee Cooper with Westinghouse for two AP1000s at V.C. Summer.
- Progress Energy with Westinghouse and Shaw Group for two AP1000s at Levy County.
- STPNOC with Toshiba for two ABWRs at South Texas Project.
- TVA has signed a conditional contract with AREVA for Engineering and Development to complete construction of Bellefonte Unit 1.

New Plant Construction, Operation, Deferral

Summary: Site preparatory work is in progress for Vogtle, V.C. Summer nuclear projects. TVA is proceeding with the completion of the Watts Bar 2 reactor and re-considering completion of Bellefonte 1 and 2.

New Nuclear Plants under Construction: In August 2009, NRC issued a Limited Work Authorization to Southern Nuclear Operating Company for the Vogtle nuclear plant site near Augusta, Georgia.

- Safety-related construction for Vogtle began March 2010 with placement of engineered backfill in accordance with the Limited Work Authorization.
- Early site preparation has begun for V.C. Summer with excavation and fabrication of the reactor pressure vessel and steam generators
- Watts Bar 2, near Spring City, Tennessee, resumed at an estimated total cost of \$2.5 billion.
- Construction permits have been reinstated for Bellefonte Units 1 and 2 near Scottsboro, Alabama; the TVA Board approved \$248 million for Unit 1 construction and awarded engineering contract to Areva. The TVA board of directors is expected to decide whether or not to continue with Unit 1 by August 2011.
- Construction of some reactor designs to be built in the US is underway in other countries: four AP1000s in China, two APWRs in Japan, one EPR in Finland and another in France; four ABWRs are in operation in Japan and four are nearing completion in Japan and Taiwan.

New Nuclear Plant Begin Operation: None.

Federal Financial Incentives

Summary: EAct 2005 incentives are at various stages of development: two rules issued and one notice published.

Standby Support: Rule issued, no contract issued.

- Final Rulemaking Issued August 2006.

Production Tax Credits: Notice issued.

- Internal Revenue Bulletin 2006-18 published May 2006.
- Treasury/IRS may issue additional guidance on Tax Credits for new nuclear plants; however, a date has not been set.

Nuclear Energy Facility Loan Guarantees: Congress granted DOE authority to issue \$20.5 billion in guaranteed loans.

- DOE issued solicitations for \$18.5 billion in loan guarantees for new nuclear power facilities and \$2 billion for the "front end" of the nuclear fuel cycle on June 30, 2008.
- DOE offered a conditional commitment agreement for \$2 billion to AREVA to support the Eagle Rock Enrichment Facility in Idaho Falls, Idaho.
- DOE has issued conditional commitment agreements to Georgia Power Corp., Oglethorpe Power Corp. and the Municipal Authority of Georgia for the financing of Vogtle Units 3 and 4, totaling \$8.33 billion

Due to the current limited guarantee authority, DOE has narrowed the remaining power facilities under consideration for loan guarantees to three applicants, which are planning to build a total of five reactors.